IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: SANKARANARAYANAN

Appl. No.: UNASSIGNED Art Unit: UNASSIGNED

Filed: HEREWITH Examiner: UNASSIGNED

For: Antennas Supporting High Density of Wireless | Atty. Docket: TI-37177

Users In Specific Directions

INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner for Patents Alexandria, VA 22313-1450

Sir:

Listed below on an attached Form PTO-1449 is information known to applicant(s). A copy of each listed publication and U.S. and foreign patent, except for pending U.S. applications, is being submitted herewith, along with a concise explanation of information in a foreign language, if any, pursuant to 37 C.F.R. §1.97-1.98.

Applicants respectfully request that the listed information be considered by the Examiner and be made of record in the above-identified application. The Examiner is requested to initial and return it in accordance with MPEP §609.

This statement is not intended to represent that the information cited in the statement is, or is considered to be, material to patentability as defined in §1.56. Applicant reserves the right to establish patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information is not enabling for the teachings purportedly offered.

Appl. No.: UNASSIGNED Inventor: SANKARANARAYANAN

<u>X</u>	This statement qualifies under 37 C.F.R. §1.97, subsection (b) because (check all that
	apply):

- **(1)** It is being filed within 3 months of the application filing date; OR
 - **(2)** It is being filed within 3 months of entry of a national stage; OR
- (3) It is being filed before the mail date of the first Office Action on the merits.
- 37 C.F.R. $\S1.97(c)$. If this statement is being filed after the latest of: (1) three months beyond the filing date of a national application; (2) three months beyond the date of entry of the national stage as set forth in §1.491 in an international application; or (3) the mailing date of a first Office action on the merits, but before the mailing date of the earlier of a final office action under §1.113 or a notice of allowance under §1.311, then:
 - a certification as specified in §1.97(e) is provided below; or
 - a fee of \$180.00 as set forth in §1.17(p) is authorized below, enclosed, or included with the payment of other papers filed together with this statement.
- 37 C.F.R. §1.97(d). If this statement is being filed after the mailing date of the earlier of a final office action under §1.113 or a notice of allowance under §1.311, but before payment of the issue fee, then:
 - A. a certification as specified in §1.97(e) is submitted herewith; and
 - В. a petition under 37 C.F.R. §1.97(d) requesting consideration of this statement is submitted herewith; and
 - a fee of \$130.00 as set forth in §1.17(i)(1) is authorized below, enclosed, or C. included with the payment of other papers filed together with this statement.

Respectfully submitted,

Date: January 13, 2004

Narendra Reddy Thappeta Registration Number: 41,416

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INF	ORMATION D	oisc	CLOSURE	Application Number	UNASSIGNED		
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STATEMENT BY APPLICANT				First Nam d Inv ntor	Ravishankar SANKARANARAYANAN		
			A	Group Art Unit	UNASSIGNED		
(use as many sheets as necessary)				Examiner Name	UNASSIGNED		
Sheet	2	of	2	Attorney Docket Number	TI-37177/TXN-088		

	NON PATENT LITERATURE DOCUMENTS								
Examin er Initials*	Cite No. ¹								
		RAVISHANKAR and NARASIMHAN, "Multiple Scattering of EM waves by Dielectric Spheres located in the near field of a source of radiation", IEEE Transactions on Antennas and Propagation, Vol AP35, No 4, pp 399- 405, April 1987.							
		C.A.FERNANDES, "Shaped Dielectric lenses for Wireless Millimeter-Wave Applications", IEEE Antennas & Propagation Magazine, Vol 41, No 5, pp 141-151, Oct 1999.							
		C.A.FERNANDES, JOSE G FERNANDES, "Performance of Lens Antennas in wireless Indoor Millimeter Wave Applications", IEEE Transactions on Microwave Theory and Techniques, Vol 47, No 6, pp 732-737, June 1999.							
		MARIO GMV SILVEIRINHA, C.A.FERNANDES, "Shaped Double-Shell Dielectric Lenses for Wireless millimeter wave applications", IEEE Transactions on Antennas and Propagation Society International Symposium, 2000., Volume: 3, No 16-21, pp 1674-1677, July 2000.							
Examiner		Date							

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TATEMENT BY APPLICANT	First Nam d Inventor	Ravishankar SANKARANARAYANAN					

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Sheet 1 of 2 Attorney Docket Number UNASSIGNED

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TI-37177/TXN-088

	U.S. PATENT DOCUMENTS								
Examiner	Cite No.¹	U.S. Patent Docum	nent	Name of Patentee or Applicant	Date of Publication of	Pages, Columns, Lines, Where Relevant			
Initials*				of Cited Document	. cited Document MM-DD-YYYY	Passages or Relevant Figures Appear			
	 								
									
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FOREIGN PATENT DOCUMENTS								
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